

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject:

Atrazine and Simazine. Requested Data Waiver for

Poultry Mecabolism Studies.

No MRID Number DP Barcode D184965

CBRS Number 10919

From:

Michael S. Metzger, Chemist Muchemistry Branch II - Reregistrat

Health Effects Division (H7509C)

Thru:

Edward Zager, Chief

Chemistry Branch II - Reregistration Support

Health Effects Division (H7509C)

To:

Walter Waldrop / Venus Eagle, PM 71

Special Review and

Reregistration Division (H7508W)

In a letter from Thomas Parshley (Ciba-Geigy) to Venus Eagle (SRRD, 11/2/92), Ciba-Geigy has requested a waiver from the requirement of poultry metabolism studies. CBRS previously required poultry metabolism studies in which chickens were dosed with either radiolabeled hydroxyatrazine or simazine, and tissue and egg residues were characterized/identified as required in Subdivision O of the Pesticide Assessment Guidelines (See 9/28/90 atrazine DCI and M. Metzger review of 1/22/92 for atrazine; simazine 9/12/92 DCI). The company states in this request that they were under the impression based on interactions with the Agency that new poultry metabolism studies would not be required. We point out that the cited DCIs include these requirements for poultry metabolism data.

The Agency currently considers the total toxic residue for these triazine pesticides to include all metabolites which have the triazine ring. Based on the available poultry metabolism studies, most of the total radioactive residue (ttr) is composed of metabolites which contain the triazine ring. Considering this, the purpose of requiring new poultry metabolism studies is twofold: first, to use the ttr as a residue esimate for dietray exposure assessment; and secondly, to determine the identity and relative percentages of metabolites in the ttr so that suitable

BEST COPY AVAILABLE

084

2

marker enforcement methodology for poultry tissue and eggs could be developed.

However, we now revise our previous requirements for these poultry metabolism studies. The registrant has previously submitted four poultry metabolism studies in which either parent atrazine, G-28273 (di-dealkylated metabolite), or biosynthesized metabolites (from treated corn) were fed (see M. Metzger, 5/3/90). These studies can be used to estimate dietary exposure for both atrazine and simazine on an interim basis; but analytical methods suitable for enforcement cannot be developed based on these data. However, in order to adequately determine marker analytical methods for poultry tissues and eggs, a specific ratio of triazine ring-containing metabolites must be fed which corresponds to that likely to be consumed by poultry. Data to determine the appropriate ratio will not be available until the required radiolabel field trials for atrazine and simazine use on poultry feed items are completed. Furthermore, depending on the results of the radiolabel field trials, it may be determined that additional poultry metabolism data are not required due to low or non-detectable residues in poultry feeds.

Based on these considerations, we reserve the requirement for poultry metabolism studies for these pesticides pending the outcome of radiolabel field trials for poultry feeds. We note that submission of a hydroxyatrazine carcinogenicity study showing no carcinogenic potential may also negate the need for these studies.

CC: M. Metzger, M. Beringer (HED), Atrazine and Simazine SF and Reg. Std. Files, RF, Circu

RDI: E. Zager: EZ: 12/3/92

H7509C:M.Metzger:MM:CBRS:Rm816G:CM#2:305-5883:12/3/92